REMARKS/ARGUMENTS

Claims 1-27, and new claims 28 and 29 are pending in the application.

Reconsideration is requested in view of the above amendments and the following

remarks.

1.   The Drawing

The Examiner has required that a drawing be submitted, asserting that the subject

matter admits of illustration to facilitate an understanding of the invention. Applicant

submits a proposed drawing herewith for consideration by the Examiner. Reconsideration

and approval of the drawing is respectfully requested.

2.   The Section 101 Rejections Have Been Overcome.

Claims 15-17 stand rejected under 35 U.S.C. 101 as being directed to non-

statutory subject matter. This rejection is respectfully but strenuously traversed and

reconsideration is requested in view of the above amendments.

Claim 15 has been amended to recite "A computer storage component including

software containing..."

Claim 16 and 17 have been amended to recite "an article of manufacture

comprising a computer storage media that implements code for securing, maintaining,

monitoring and controlling..."

For these reasons, in view of the above amendments, Applicant submits that the

claims define patentable statutory subject matter and reconsideration and withdrawal of

the rejection is accordingly requested.

3.   **The Section 102 Rejection of the Claims as Being Anticipated by Nachenberg Should be Withdrawn.**

Claims 1, 8, 11, 13, 16-19, 21, 23 and 25 stand rejected under 35 U.S.C. 102(b) as

being anticipated by Nachenberg (US 6,021,510). This rejection is respectfully but

strenuously traversed and reconsideration and a withdrawal of the rejection are hereby

respectfully requested.

The rejection set forth in the Office Action considers Nachenberg to disclose

providing a hash code table of a client, said hash code table being provided for storing a

plurality of files, citing to Nachenberg col. 2, lines 26-37, and considers the data base

storing hashes of plurality of files to meet this. (Also citing col. 1 line 60 - col. 2, line 9).

The rejection also considers Nachenberg to provide a client state code of a client and

further considers that Nachenberg discloses comparing the client state code of the client

to a said hash code table (citing, as a basis col. 4, lines 40-47). Nachenberg, at col. 4,

lines 54-64, is relied on for an alleged teaching of generating an alert mechanism when a

deviation threshold is reached based on a deviation between the hash code table values

for the said client and said client state code.

Applicant's present invention, as recited in the claims, is not anticipated by

Nachenberg, nor is it taught or suggested. Applicant's invention relates to methods,

apparatus and articles of manufacture for securing, maintaining, monitoring and

controlling systems and networks. A secure hash code table is generated or derived and

provides a base line for the network and the systems on the network. (See Applicant's

published specification at par. [0013]) Applicant accomplishes this by utilizing a

comparison cycle, wherein one or more systems or components on the network transmits a client state code. The client state code is compared to the secure hash code table value. If the client state code does not deviate from the secure hash code table value, or, alternately, if the deviation is within certain acceptable ranges (e.g., where a modal hash is derived) then the base line may be considered to represent the acceptable client state and no further action needs to be taken. If deviation is uncovered (in any manner or by an amount deemed unacceptable) an alerting mechanism is triggered.

In accordance with Applicant's specification, the claimed features are discussed, (see e.g., par. [0014] "one or more systems on the networks transmit a client state code", and see par. [0016] "a secure hash code table is comprised of secure client hash code values, and, as further described below, will provide a baseline for the system, and in turn, any networks, as ...")

Claim 1 has been amended to more particularly articulate the Applicant's present invention by reciting that the secure hash code table includes the hash codes for files on computers within the network that are to be secured and that the method further includes:

> transmitting across a network from clients located in the network a client state code; providing at least one server within the network assigned to recognize said client state code transmission, wherein said server maintains a baseline for said client, and wherein said baseline comprises said hash code table of a said client.

Applicant's invention is not disclosed or suggested by Nachenberg. Nachenberg relates to a system and method for examining a file to determine whether a computer virus is present within the file. Nachenberg indicates that file examination for the first time

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involves scanning the file with an antivirus module and that the antivirus scan is where

the hash value for each scan sector is obtained. Applicant's invention, as discussed in the

background section of the Applicant's specification is important for combating threats

that disrupt the security of computers.

Nachenberg's antivirus accelerator is recited to be provided to increase the speed

of scanning computer files by antivirus software (col. 1, lines 9-11). However,

Applicant's present invention has broad application to situations where internal activities,

such as acts by a disgruntled employee or an improper selection is made which is

inconsistent with the desired baseline as represented by the client state code in the

Applicant's present invention. Therefore, it would appear according to Nachenberg that

if a virus were not present, but rather, a file were deleted, the Nachenberg virus indicator

would not return a virus, unlike Applicant's utilization of a client state code which would

appear to detect that tampering -- that is that a change to the client baseline was made.

Nachenberg does not disclose or suggest this. In addition, claim 1 of Applicant's

invention has been amended, as pointed out above to more particularly articulate and

distinguish the present invention. Nachenberg fails to disclose or suggest the securing

method of the Applicant's invention wherein a client state code of one or more clients is

transmitted across a network and is received by at least one server. Claim 1 provides that

the baseline comprises the hash code table of the client and is maintained by the server,

and that the client state code is transmitted across a network by clients. Therefore,

Applicant provides a system where baseline security for the system, including for the

clients on the network, may be maintained, monitored and controlled, as well as secured

from incidences such as, for example, tampering or mismanagement.

Claims 18 and 19 also have been amended to recite the feature "wherein said hash

code table includes the hash codes for files on computers within the network that are to

be secured." For the same reasons, claims 18 and 19 should be patentable.

For these reasons, Applicant submits that Nachenberg fails to disclose or suggest

the Applicant's present invention as recited in the pending claims. Accordingly,

reconsideration and a withdrawal of the rejection is hereby respectfully requested.

4.   The 103(a) Rejection Over Nachenberg and Angelo Should be Withdrawn.

Claims 2, 3, 6 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable

over Nachenberg as applied to claims 1 and 19, and further in view of Angelo (U.S.

5,944,821). This rejection is respectfully but strenuously traversed and reconsideration

and a withdrawal of the rejection are hereby respectfully requested.

The rejection in the Office Action relies on the Nachenberg disclosure cited

above. However, the rejection acknowledges that Nachenberg fails to disclose the hash

code table being a secure hash code table. Angelo is relied on, therefore, for an alleged

teaching of the use of a secure hash table (citing to col. 4, lines 27-40) with the

contention that it would have been considered obvious to make a hash table of

Nachenberg a secure hash table to provide an integrity assessment code.

Applicant's invention as recited in claims 2, 3, 6 and 20 is not obvious in view of

the cited references. First, for the same reasons set forth above as to why the Applicant's

invention should be patentable over Nachenberg, even in view of the further combination

of Angelo, the present invention is still not disclosed or suggested. Second, one looking

to Nachenberg would not have been led to provide a secure hash table. Applicant desires

to consider a secure client state code, whereas Nachenberg seeks accelerating antivirus

program speed by apparently attempting to prescan and store certain prescan results.

For the above reasons, Applicant submits that Nachenberg and Angelo fail to

disclose or suggest Applicant's present invention. Accordingly, reconsideration and a

withdrawal of the rejection is respectfully requested.

5.   **The 103(a) Rejection of Claims 4, 5, 14, 15, and 26-27 Over Nachenberg (Alone or In Combination With Angelo) in Further View of Crockett (US 5,619,644) Should be Withdrawn.**

Claims 4, 5, 14, 15 and 26-27 stand rejected under 35 U.S.C. 103(a) as being

unpatentable over Nachenberg alone or combination with Angelo as applied to claims 2

and 25 above in view of Crockett (US 5,619,644). This rejection is respectfully but

strenuously traversed and reconsideration and withdrawal of the rejection is hereby

respectfully requested.

The Examiner in the Office Action acknowledges that Nachenberg fails to

disclose grouping (considered in the rejection to be compiled) the secured system data

file and extracting the modal hash value. The Examiner, however, though

acknowledging that Nachenberg fails to disclose these features of Applicant's claimed

method, considers that it would have been obvious to take an additional reference,

namely Crockett, which is considered in the Office Action to teach grouping of files

(citing to col. 3, line 59 - col. 4, line 22 of Crockett), as well as the interjection of official

notice taken regarding extracting the modal hash value. The rejection is premised on the

theory that motivation to make the changes, that is to revise Nachenberg as well as

Crockett to the extent that there is official notice regarding extracting the modal hash

value, would be to do so to recover from a disaster and use the most common value

among the group. First, the substance of the rejection does not appear to come from the

references themselves, but rather, from Applicant's own disclosure, and should be

withdrawn for that reason alone.

Second, the rejection should be withdrawn for additional reasons. Applicant's

invention, however, does not simply relate to a most common value among the group.

The group of what? The references do not teach or suggest that. It is the Applicant's

invention which seeks to secure clients within the network. The passage relied on in

Crockett reads as follows:

> In another embodiment of the present invention, a data storage system co-ordinates failure information amongst system components associated with an error condition occurring in the data storage system, wherein the system components include software, hardware and microcode control structures. The system components include a host processor, and one or more storage controllers coupled to non-volatile storage devices for processing and storing record updates. The host processor runs applications that generate the record updates and transmit I/O operations to the one or more storage controllers for eventually storing the record updates on the non-volatile storage devises. The host processor further includes a data mover for reading the record updates from the one or more storage controllers and assembling the record updates into groups of self describing records for transmission to a remote storage system for disaster recovery purposes. When an error occurs, the data mover receives an error code from one of the system components indicating a type of error condition that occurred. In response, the data mover issues a state save command to those system components associated with the error condition for causing said associated system components to temporarily suspend processing record updates while collecting failure information. The failure information for each system component is correlated according to the state save command. The data mover includes a trace queue for storing failure information associated with the data mover, and a control

section for managing record updates read into the data mover. A plurality
of buffers are provided in the data mover for storing the record updates
and their associated headers. (Crockett col. 3, line 59 - col. 4, line 22.)

To the extent the rejection relies on Crockett for an alleged teaching of "grouping files",

what is actually referred to in Crockett is "assembling the record updates into groups of

self describing records for transmission to a remote storage system for disaster recovery

purposes". That passage does not teach, suggest or disclose setting and utilizing a modal

hash value, that is, a hash value that is the most frequently occurring hash value for a

number of files. Moreover, one reading Crockett would not learn to provide an

association or correspondence in regard to a modal hash value, when the assemblage of

updates into groups are deemed groups of "self describing records". The Crockett

reference is not believed to disclose or provide a teaching of what Applicant recites as the

invention in the claims at issue in this rejection, namely, 4, 5, 14, 15 and 26-27. As to

official notice regarding "extracting the modal hash value" that does not appear anywhere

in the cited references, but rather, is solely disclosed by the Applicant's own specification

and invention. Moreover, Nachenberg relates to a disclosure of expediting virus

determinations associated with "a digital computer to determine whether a computer virus

is present in the file". Applicant's invention, as recited in the claims, is distinguishable

over the cited references. Reconsideration and a withdrawal of the rejection is

respectfully requested.

6.   **The 103(a) Rejection of Claim 7 Should be Withdrawn.**

Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the

modified Nachenberg and Angelo system as applied to claim 3 above, and further in view

of IEEE. This rejection is respectfully but strenuously traversed and reconsideration and

a withdrawal of the rejection is hereby respectfully requested.

The rejection in the Office Action with respect to claim 7 acknowledges that

Nachenberg and Angelo fail to disclose using a baseline to generate the table. The

rejection further considers IEEE to teach the use of a baseline and therefore be

combinable with the other disclosures "to have an agreed upon product" (citing to page

87 of IEEE). First, for the reasons set forth above, the Applicant's invention is not

disclosed, nor is it taught or suggested, by Nachenberg or Angelo. Even if the further

combination of IEEE is made, the present invention, as recited in claim 7, still should be

patentable.

Accordingly, reconsideration and a withdrawal of the rejection is hereby

respectfully requested.

**7.   The 103(a) Rejection of Claims 9 and 22 Over Nachenberg Should be
         Withdrawn.**

Claims 9 and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over

Nachenberg. This rejection is respectfully but strenuously traversed and reconsideration

and a withdrawal of the rejection are hereby respectfully requested.

The Examiner's rejection considers that Nachenberg fails to disclose logging the

results of the comparison. However, official notice is taken that it would have been

obvious to one of ordinary skill in the art to log Nachenberg's comparison results.

Applicant submits that the failure in Nachenberg to disclose logging is consistent with the

failure of Nachenberg to disclose the Applicant's present invention. Moreover, for the

reasons set forth above and for these additional reasons claims 9 and 22 are not taught,

suggested or disclosed by Nachenberg. Nachenberg desires speed, and, as stated, desires

not to consider files that it has already scanned. The logging, considered by the rejection

to be an obvious enhancement to Nachenberg, would appear to be inconsistent with what

Nachenberg is attempting to do. For these reasons, reconsideration and a withdrawal of

the rejection is respectfully requested.

8.   The 103(a) Rejection of Claim 10 Over Nachenberg Should be Withdrawn.

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over

Nachenberg as applied to claim 1 above, and further in view of Adya et al. (US

20020188605). This rejection is respectfully but strenuously traversed and

reconsideration and a withdrawal of the rejection is hereby respectfully requested.

The Examiner's rejection considers that Nachenberg fails to disclose securing a

client in lock down mode. The Examiner considers Adya et al. to teach this at paragraphs

144-146. For the same reasons as set forth above, Applicant's invention is not obvious in

view of Nachenberg even when the further combination with the Adya et al. reference is

made. Reconsideration and a withdrawal of the rejection are hereby respectfully

requested.

**9.   The 103(a) Rejection of Claims 12 and 24 Over Nachenberg Should be
         Withdrawn.**

Claims 12 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable

over Nachenberg as applied to claims 1 and 19 above, and further in view of Pascucci et

al. (US 5,463,735). This rejection is respectfully but strenuously traversed and

reconsideration and a withdrawal of the rejection is hereby respectfully requested.

The Examiner admits that Nachenberg fails to disclose initiating an auto restore component. It would appear, first for the reasons set forth above, Applicant's invention is not obvious or anticipated by Nachenberg. However, for additional reasons, one viewing Nachenberg would not have been led to employ an auto restore feature since Nachenberg desires to indicate whether or not a virus is present. The restoring would not be indicated as to what to restore to since, according to Nachenberg, if a virus is not present many changes could have occurred without a virus being present. Therefore, a restore point would first have to be indicated and Nachenberg would not be able to provide that option nor would it teach or suggest it. Accordingly, Applicant's invention is distinguishable as pointed out above, and is further particularized in claims 12 and 24, in that the client state code provides the baseline and the hash code values represent a baseline so that clients on the network may be secured against intentional or unintentional file deletions or mishaps. For the above reasons, and for these additional reasons, Applicant's invention, as recited in claims 12 and 24 should be patentable and the 103(a) rejection withdrawn.

10. The Double Patenting Rejection.

Claims 1-3, 8-11 and 13-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting in view of claims 11-15, 18, 20 and 22-24 of copending Application No. 10/032,252 (now US 7,143,113). Applicant submits that the claims are not identical and must be considered in view of the amendments to the claims herein. Reconsideration is requested. However, if and when the double patenting rejection is the only rejection that remains Applicant will consider submitting a terminal disclaimer to overcome the rejection.

Applicant also notes the double patenting rejection with respect to claims 4-7, 12

and 24 in view of the same application number in combination with Nachenberg, Angelo,

Crockett, IEEE and Pascucci et al. as applied in the above claims. For the reasons set

forth above this rejection is respectfully traversed and a withdrawal of the double

patenting rejection is requested.

NEW CLAIMS 28 AND 29:

New claims 28 and 29 have been added to more particularly distinguish

embodiments of the Applicant's present invention over the cited references. New claim

28 relates to the Applicant's method for securing, maintaining, monitoring and controlling

computer networks and clients located therein, where the client's within the network are

identical clients and have client state codes which are identical to each other. Claim 29

further particularizes the Applicant's present invention by reciting the method where the

clients have particular files present thereon which are common to one or more clients.

Therefore, according to this embodiment, as recited in new claim 29, the hash code table

may include concatenated file names and hash codes stored therein. New claims 28 and

29 are supported by the application, and no new matter has been introduced. (See e.g.,

par. [0018] of Applicants specification) Accordingly, for the reasons set forth above and

for these additional reasons these cited references relied on in the Office Action

rejections are not believed to teach, suggest or disclose the Applicant's present invention

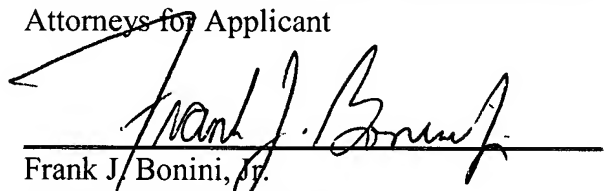as defined by new claims 28 and 29.

CONCLUSION

Applicant's invention is not taught, suggested or disclosed by the cited references relied on by the Examiner. Accordingly, Applicant's presently claimed invention should be patentable.

If necessary, an appropriate extension of time to respond is respectfully requested.

The Commissioner is authorized to charge any additional fees which may be required to Patent Office Deposit Account No. 05-0208.

Respectfully submitted,
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